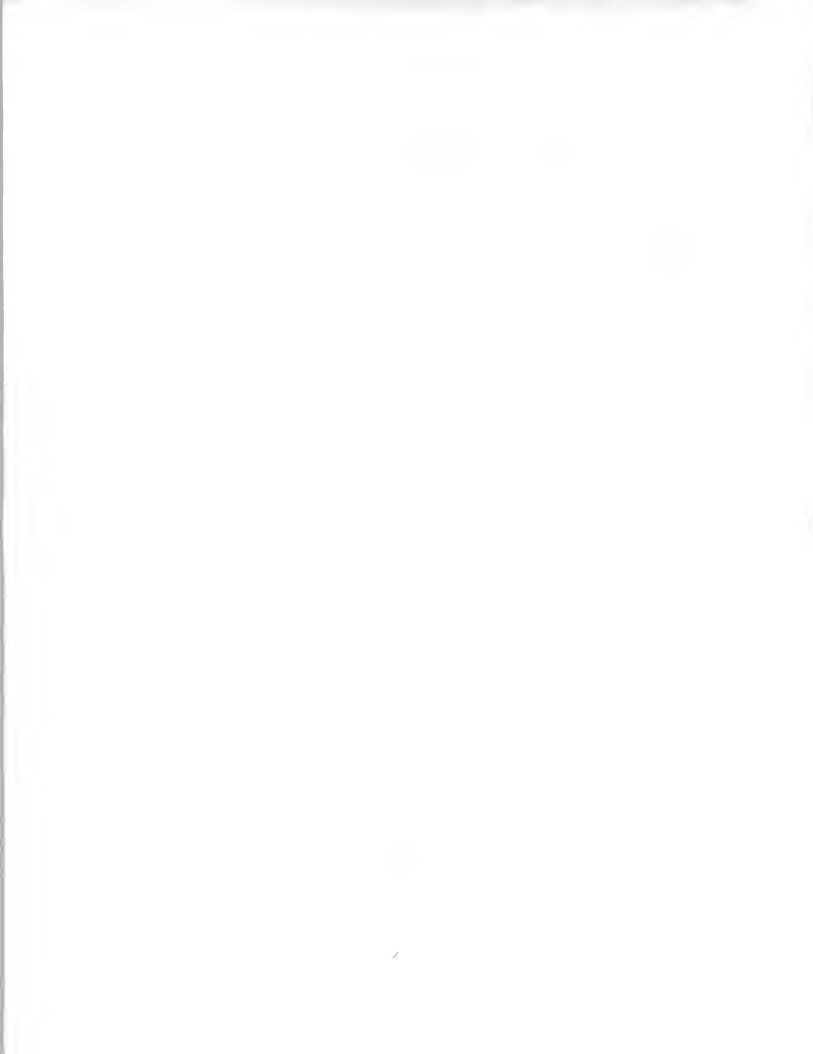


OCTOBER 1987

ANALYSIS OF MOMENTUM SERVICE - USER SATISFACTION

A Custom Study Proposal
For Momentum Service Company
by INPUT
October 1987

INPUT®

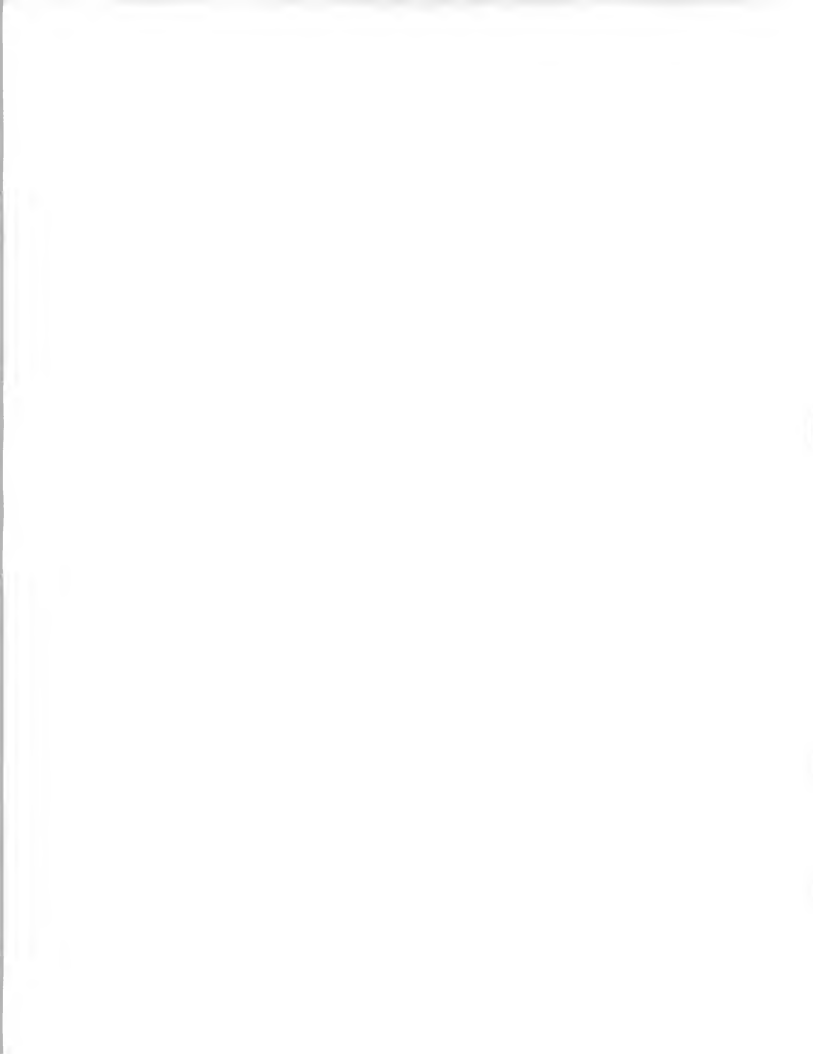


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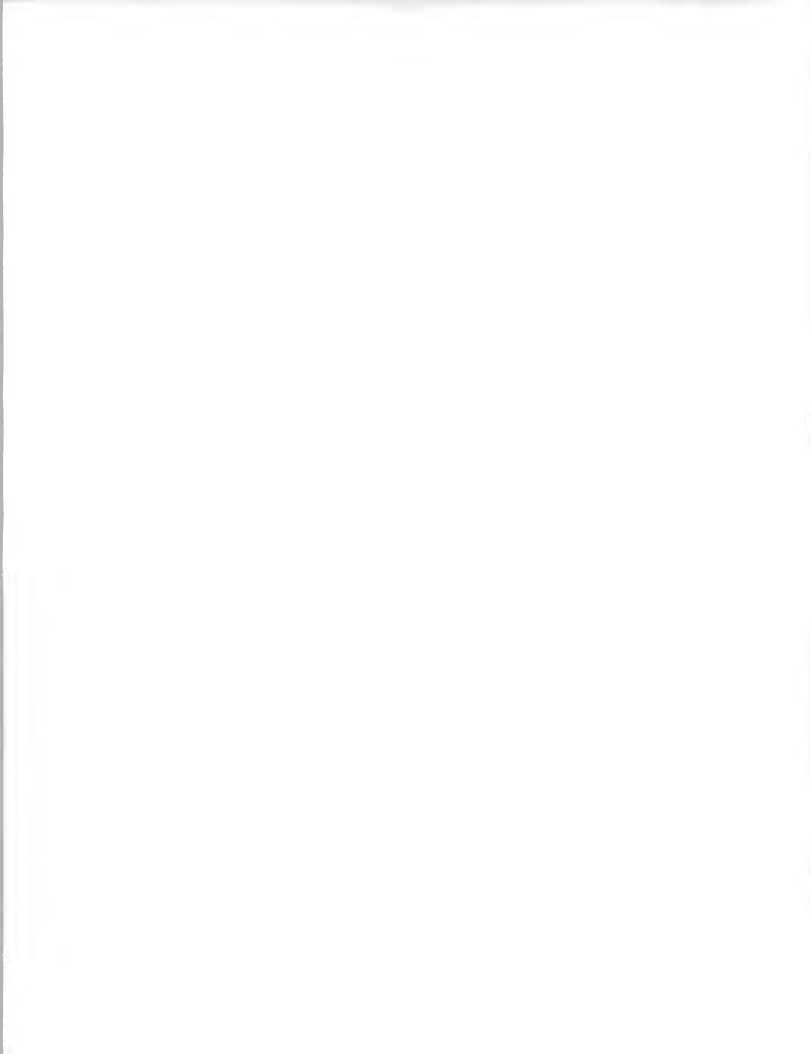
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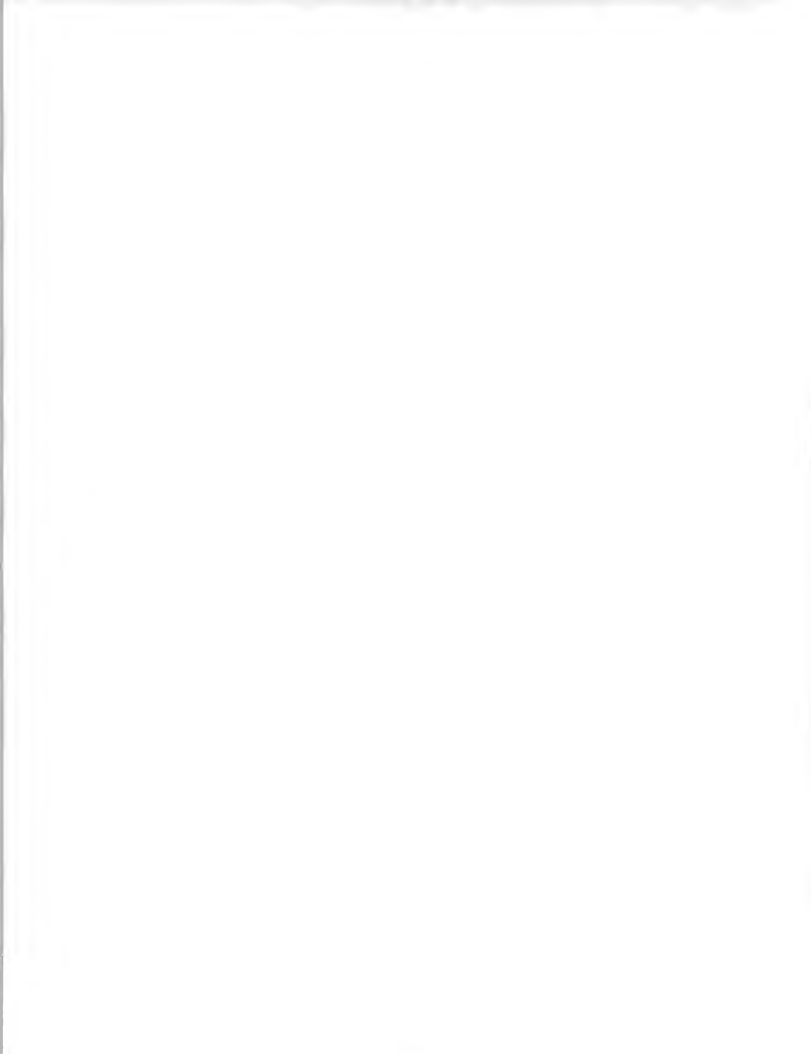
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Introduction





I

Introduction

A

Scope

The support requirements of systems users are changing as dramatically as the technology feeding the industry and as rapidly as the competition driving it. Keeping abreast of these user perceptions is critical in today's market environment, as control over the service dollar becomes increasingly important to equipment manufacturers as well as third-party service vendors. Declining hardware sales revenues are forcing equipment vendors into a more aggressive role in the already crowded support marketplace, and TPMs are up against increasingly ominous competition as the market consolidates, leaving fewer but stronger players to compete against.

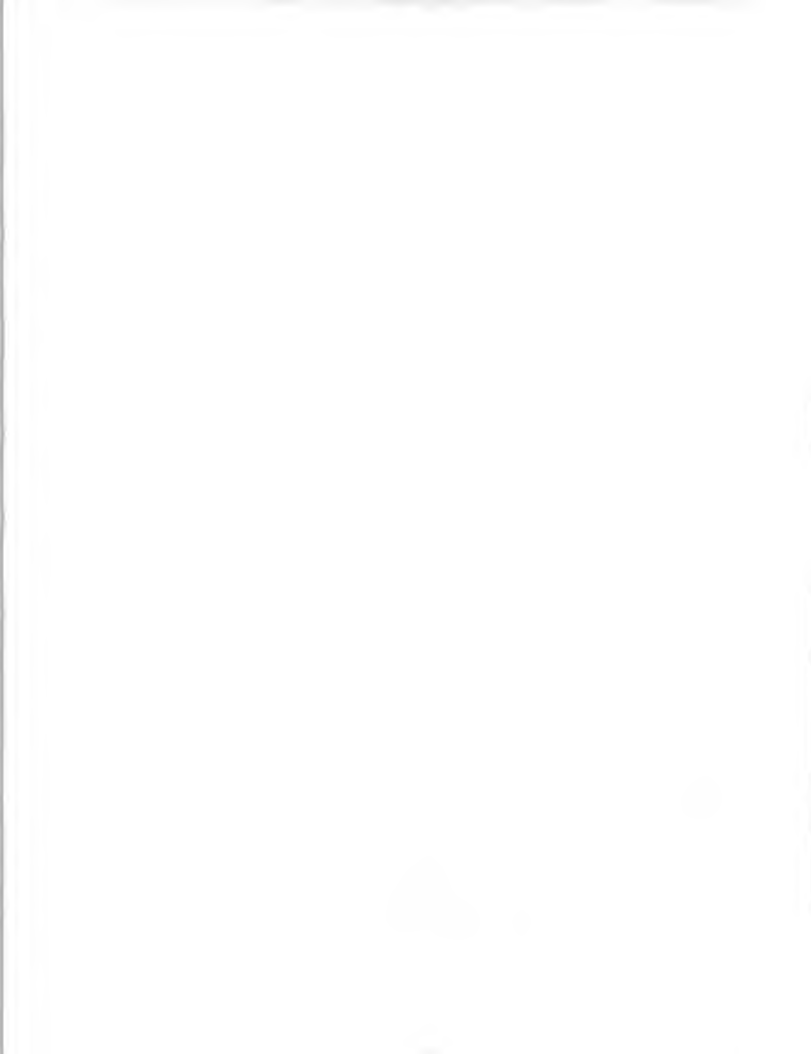
Users are becoming increasingly aware of the potential of their support dollars as competition over their systems support contracts intensifies. Spurred as well by rising demands on their system's performance, users are expecting increasing varieties and levels of support from their vendor. Staying on top of these user perceptions is key in the fight to keep customers satisfied and, in turn, to keeping customers.

This report has been prepared by INPUT to analyze the perceptions of Momentum Service Company's customer base. Measuring the satisfaction of Momentum users in terms of both service administration and delivery components, the report presents a series of exhibits providing the reader with a clear cross-section of current user requirements.

B

Methodology

A sample of 200 users of Momentum support were contacted in preparation for this report, and a brief phone interview (see Appendix A) was conducted with the appropriate Information Systems official at each site. The respondents were solicited from a list of over 2,000 Momentum users supplied to INPUT by Momentum for this project. A number of specific support issues were explored in the course of the interview, and users expressed their satisfaction with support in terms of both objective ratings and subjective comments regarding their perceptions of Momentum as a service provider.



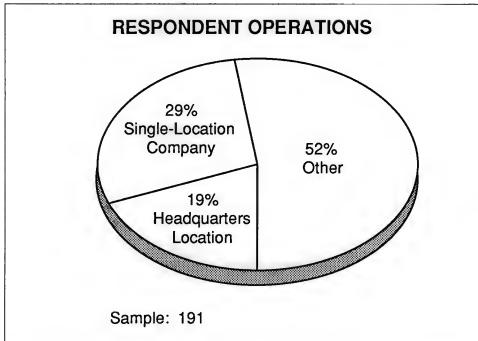
Accompanying this report is a copy of the original data used in analysis, provided on a standard DOS-formatted IBM PC/compatible diskette for use with the dBASE III software package.

C

Demographics

Users were asked, in the course of the interview, to identify a number of operational factors so that more specific subgroups of Momentum's customer base could be isolated for analysis. Exhibit I-1 provides a breakdown of the sample in terms of the user's business organization, showing that 29% of the respondents' sites were single-location companies and 19% served as headquarters offices for a larger operation. The remaining 52% of the sample fell into a third category which, obviously, includes branch locations of corporations as well as government offices and other such operations.

EXHIBIT I-1

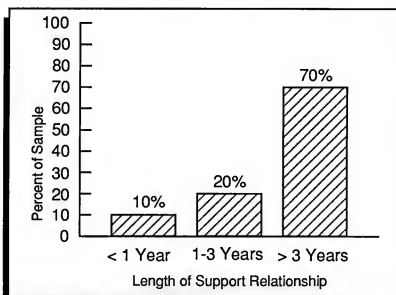


The length of the service relationship with Momentum was also probed, the sample breakout (shown in Exhibit I-2) indicating that a major chunk of Momentum's current business base was carried over from their association with Mohawk Data Sciences. Since 75% of the entire sample have been under Mohawk or Momentum contracts for at least three years, the sample provides evidence of a positive sense of customer loyalty to the organization, sustained even through the reorganization into Momentum Services. At the same time, the sample also suggests that Momentum has had at least some success at selling new service contracts as an independent service provider.



EXHIBIT I-2

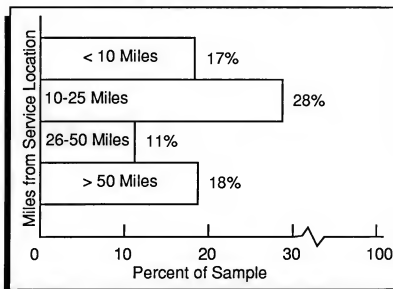
YEARS OF MOMENTUM SUPPORT



Sample: 200

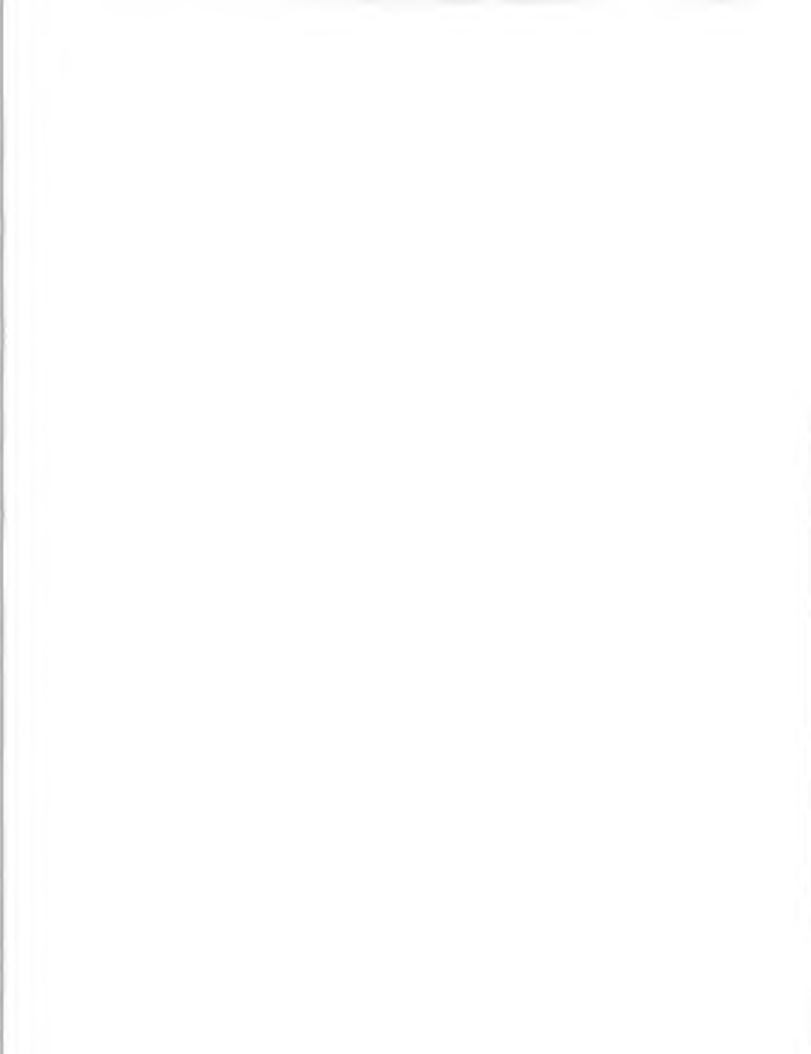
As shown in Exhibit I-3, users most commonly were supported by a Momentum service office within 25 miles of their system site, reflecting the growth in Momentum's operations. Eighteen percent of the sample was located more than 50 miles from a service site but, despite the distance obstacle, still remained relatively satisfied with the support received from Momentum, as evidenced in the following section of our report.

EXHIBIT I-3

DISTANCE FROM MOMENTUM
SERVICE LOCATION

Sample: 200

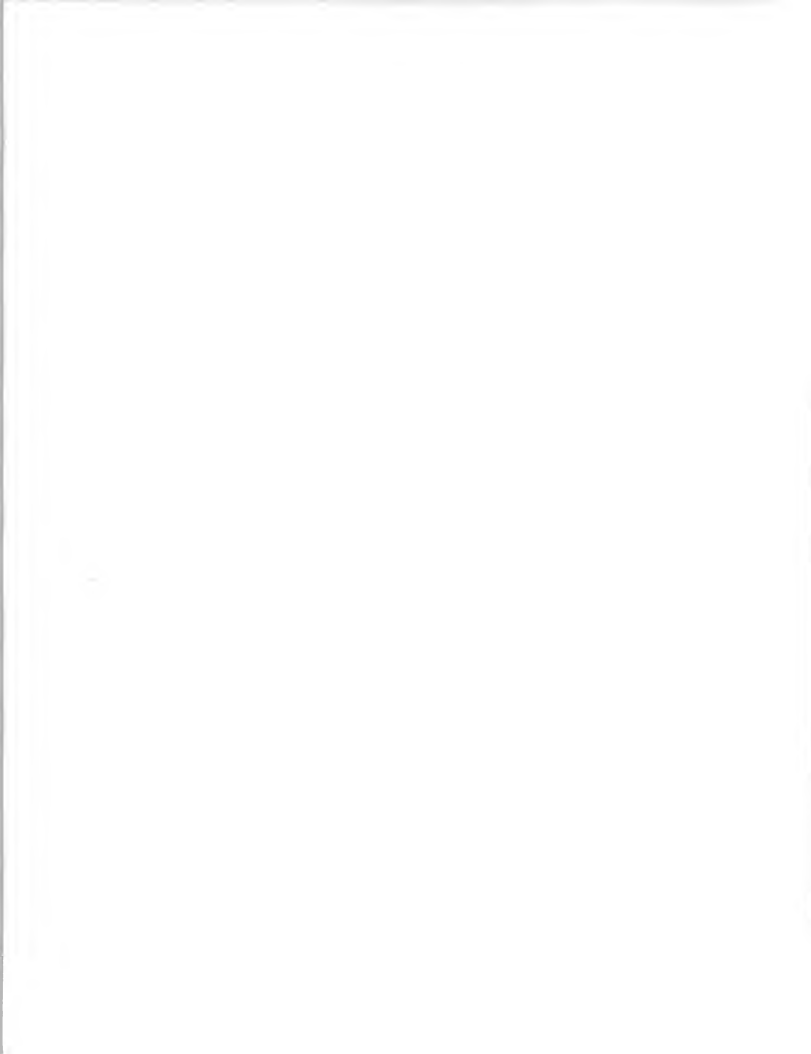
Note: 26% of Sample Responded "Don't Know"





Momentum User Satisfaction





II

Momentum User Satisfaction

A

Satisfaction With Response Performance

In terms of response to their trouble calls, users sampled reported a relatively high degree of satisfaction with Momentum support. Averaging 10.7 hours, Momentum's current response performance satisfied 85% of the entire sample, with specific groups of users expressing higher or lower satisfaction (see Exhibit II-1), dependent upon their support demands.

As examined in Exhibit II-2, these demands varied between the distance subgroups, the largest among them (users located between 10 and 25 miles from a service location) expressing the highest response requirements. Response time demands within this group ranged from one hour to 24 hours, but over 50% of these users required response within one hour of their initial call, considerably skewing the mean value.

Momentum, in the face of these higher demands, responded faster on average to the calls of these users, averaging a seven-hour response performance and satisfying 83% of this user group (shown in Exhibit II-1). Users located closer to a Momentum support facility were the most satisfied group (94%) with the slightly higher mean response of 10.3 hours. Users in this group had a wide spread of response requirements, with an equal amount of users requiring one hour as required 24 hours. The average response received fell below user demands by 1.2 hours, the difference mainly attributable to those users expecting response in one hour or less.

This brings up a significant issue regarding customer satisfaction: When measuring users' happiness with specific components of support, it is equally important to discern their expectations in each area so that a base can be established from which the vendor can act on improvement. Although averaged figures provide a good starting point for the measurement of user satisfaction, the ranges of user expectations vary widely (as evidenced above) and directly influence satisfaction with support delivered.

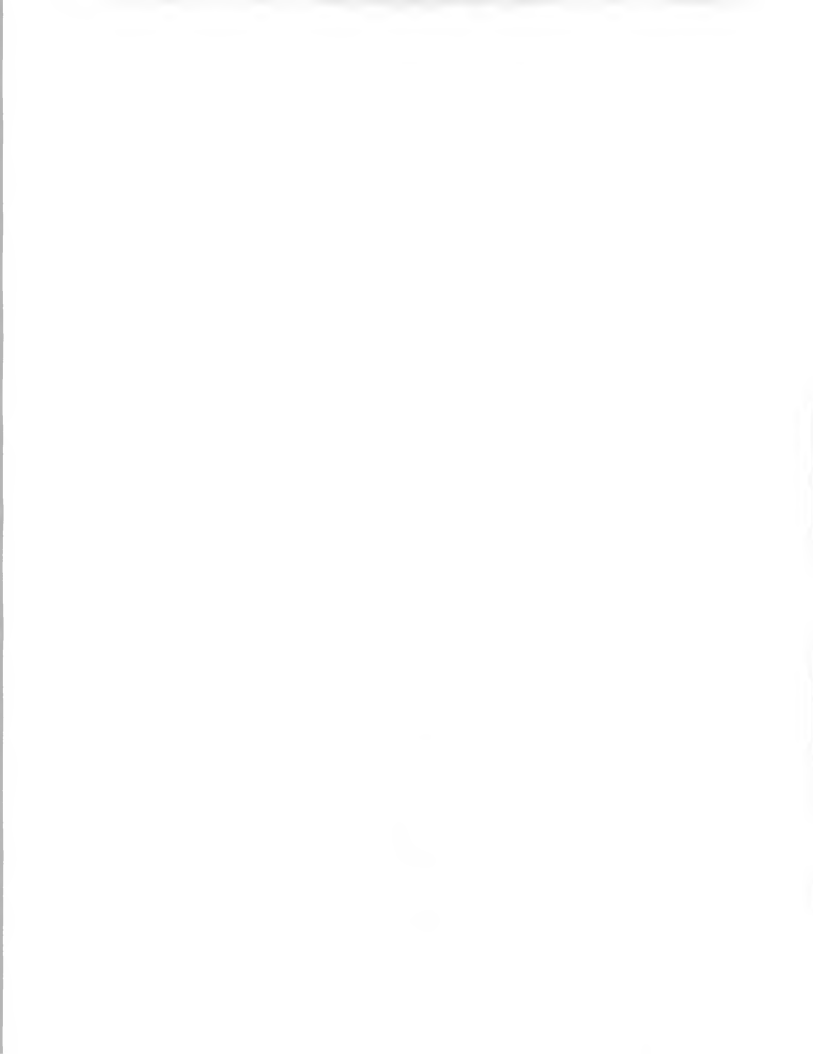
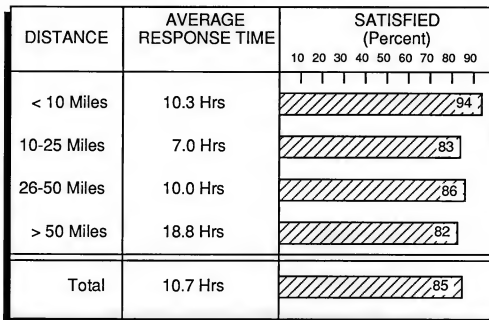


EXHIBIT II-1

DISTANCE FROM MOMENTUM LOCATION VERSUS RESPONSE TIME

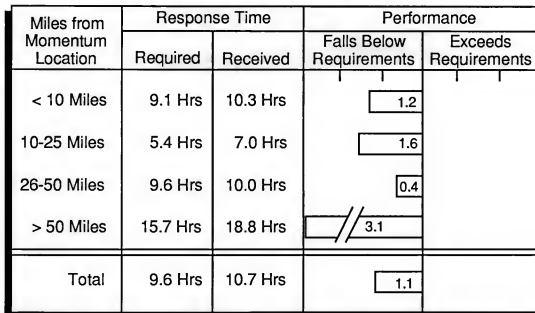


Sample: 195

Standard error of the mean = 2.2

EXHIBIT II-2

RESPONSE REQUIREMENTS VERSUS PERFORMANCE



Sample: 195

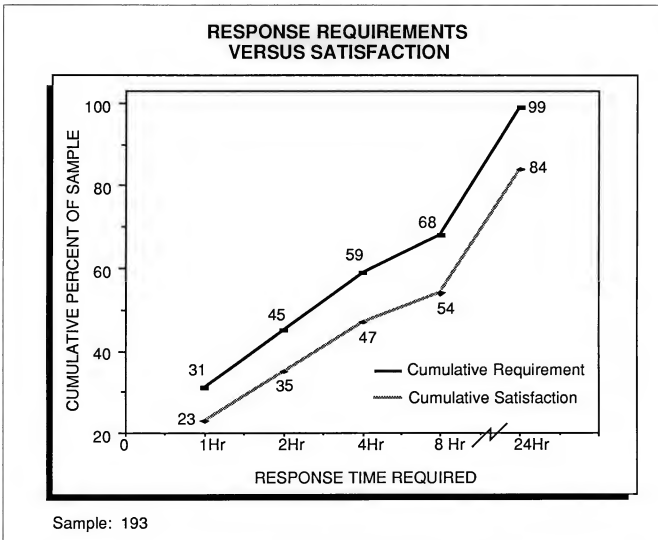
Average standard error of the mean = 1.9

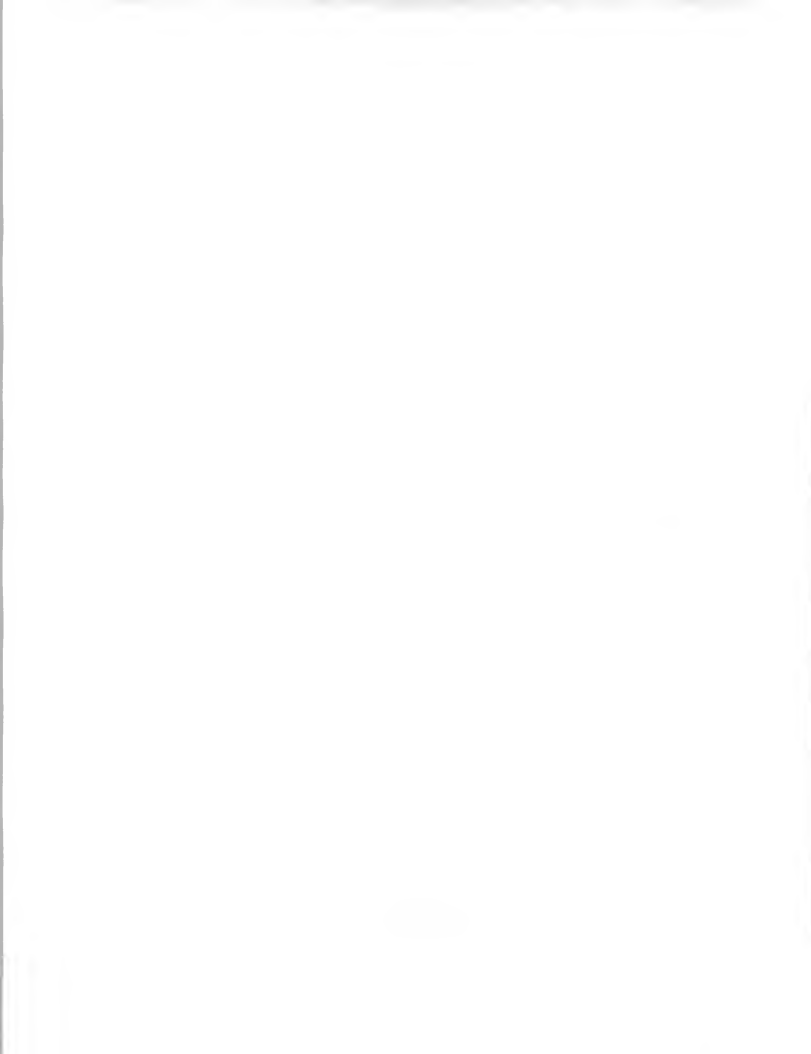


Exhibit II-3, directly comparing user expectations to the support they received within specific need-related subgroups, more clearly maps Momentum's ability to meet user requirements at the progressive levels of response demanded. The curve depicting user satisfaction closely follows the rise of user expectations and shows that, overall, Momentum provides response consistently approximating user requirements at each level.

More importantly, this response performance consistently falls below the level of user demand, even at the lowest level of response requirements (at 24 hours). Although Momentum is aware of and targeting the correct levels of demand across its customer base, improvements in response performance are necessary across the board if user satisfaction is to be raised.

EXHIBIT II-3

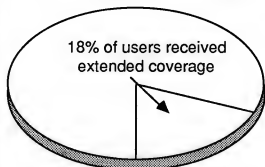




In the specific area of extended coverage response, users were asked to rate Momentum performance on a scale of 1 to 10. Of the limited percentage of users who were currently receiving extended coverage (only 18%), off-hours response performance rated a 7.8. Of equal significance, however, was the fact that of those users currently under contract for extended coverage, 39% had never called for support during off-hours (see Exhibit II-4).

EXHIBIT II-4

EXTENDED COVERAGE RESPONSE PERFORMANCE

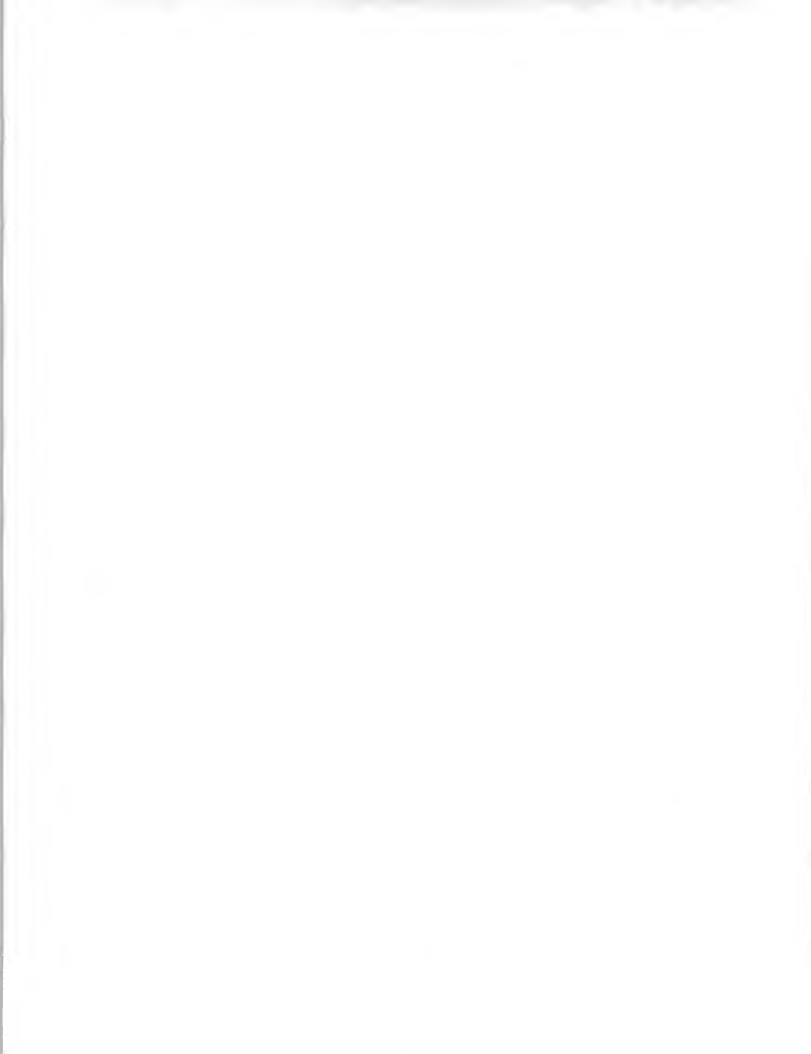


- Thirty-nine percent of users contracting for extended coverage had never utilized it.
- Users experienced with extended coverage rated satisfaction with off-hours response at 7.8.*

*Sample: 14

Rating Scale: 1 = Low, 10 = High

This underutilization of extended-coverage contracts could be a potential problem for Momentum in its effect on user satisfaction with overall support. Unless the coverage (and associated fees) are clearly identified and marketed to users as an "extra protection" for their systems, some users may see the coverage as an unnecessary expense. As opposed to



the more visible and obvious benefits of primary coverage, extended support acts more as a form of "insurance," not actively used, but vital when needed.

To help raise the profile of extended-coverage to users, Momentum might consider scheduling preventive maintenance calls during off-hours, at least for key accounts where the loss of extended support revenues would be significant. Visits by Momentum personnel during these extended hours would give doubting users a feeling of receiving something "tangible" for those additional support dollars and help to alleviate a problem highlighted later in this report (Section C), that of preventive maintenance.

B**User Satisfaction
With Personnel and
Administration**

Users were also queried about their relationship with Momentum support personnel and were asked to rate their satisfaction in a number of key areas (see Exhibit II-5). Although on average Momentum support was rated highly in all areas (8.3 to 8.8 out of 10), a number of specific complaints surfaced when users were asked to openly discuss areas in need of improvement, and ratings in specific areas of personnel support proved very inconsistent across the sample group.

EXHIBIT II-5

**USER SATISFACTION WITH MOMENTUM
SUPPORT PERSONEL**

SUPPORT COMPONENT	RATING (1 = Low, 10 = High)
Customer Engineer Attitude	8.8
Communication with Engineer	8.8
Customer Engineer's Appearance	8.6
Local Service Manager	8.6
Communication with Local Service Management	8.3

Average standard error of the Mean: 0.1



As evidenced in Exhibit II-5, the majority of users are highly satisfied with their dealings with their field engineer (FE) and local support office. There was a constant 10 to 15% of these users, however, who consistently voiced their dissatisfaction, in both their objective ratings and in their comments about their assigned field technician.

Exhibit II-6 highlights common complaints of this group of dissatisfied users, with many comments centering on attitude and performance problems, even to the degree of users expressing their desire for a new FE to support their system. Although the group represents only approximately 10% of the entire sample, Momentum should be aware of the potential threat an inconsistent relationship with field personnel can pose to continued business.

EXHIBIT II-6

FIELD ENGINEER PERFORMANCE SPOTTY

- "Need top-quality technical support."
- "Engineer's attitude needs to improve."
- "Make service personnel more accessible."
- "Technicians need upgraded training."
- "(Need) more representatives."

Sample: 16

Along the same lines, ratings of administrative personnel at the local level were nearly as high across the total sample, but problems surfaced in regards to communication and dispatching when users discussed areas in need of improvement. Exhibits II-7 and II-8 present an overview of comments directed at the area service level.

Mostly centering around communications problems (between Momentum and MDS Corporate, between Momentum and the customer's operation, or between the customer and the dispatch center), the comments indicate that tighter controls over customer interface functions should be instituted, especially in terms of the dispatch function, which directly affects response and FE performance.

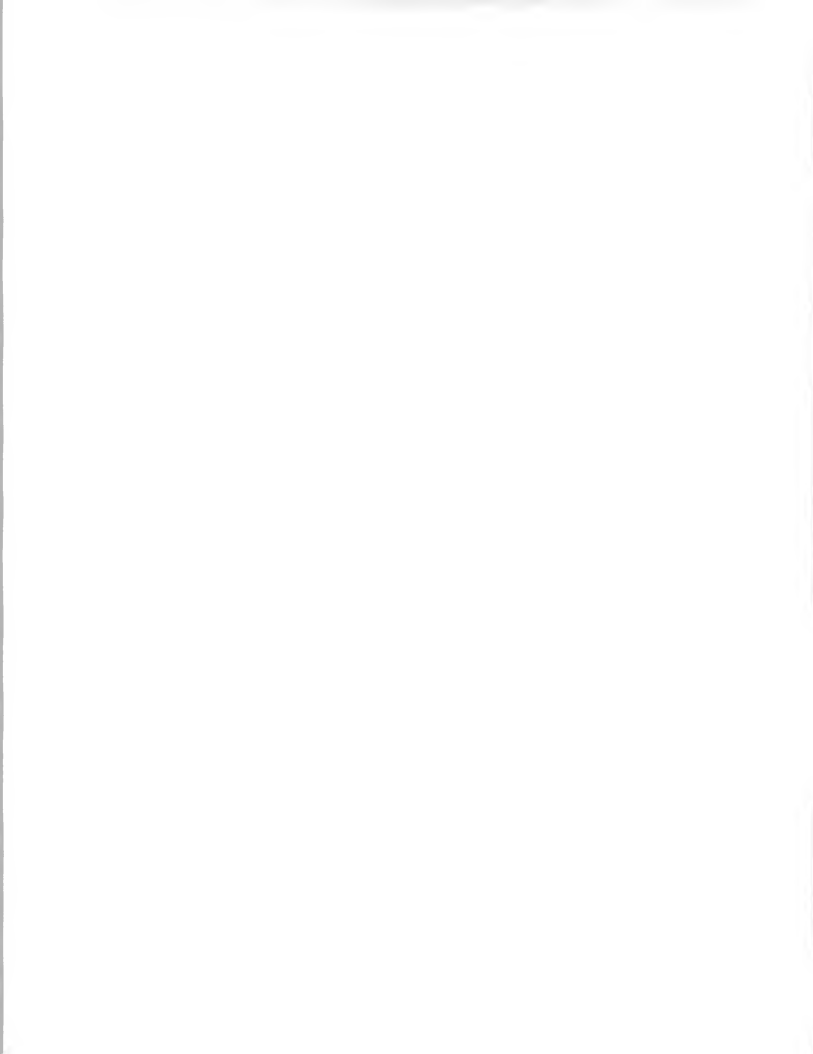


EXHIBIT II-7

PROBLEMS REPORTED WITH ADMINISTRATION

- "More direct communication available with local service office."
- "Better accounting, billing & administrative functions."
- "(Problem) trying to communicate with the two organizations - MDS vs. Momentum."
- "Overall positive attitude needed."

Sample: 14

EXHIBIT II-8

**DISPATCHING OPERATION
A COMMON CONCERN**

- "800 number is a problem."
- "Dispatch service takes too long to reply."
- "Dispatch not quickly relaying messages to engineer."
- "Would like a better way to communicate with people at the 800 number."
- "Takes too long to pick up on call-in."

Sample: 18



These complaints voiced by users should not completely overshadow the positive response of the majority of sampled users; the eight point-plus average earned by these customers' representatives should be applauded! However, the responses of those dissatisfied users are important indicators of current and potential problems prominent in users' minds. Appropriate attention should be paid to this small but vocal group, both in an attempt to retain the business of what could represent over 10% of Momentum's customer base and as an alert to potential problems within an essential area of support.

Local management and, even more directly, the attending FE and dispatch assistants are often the users' only contact with Momentum and represent Momentum as a corporation and as a business. Accordingly, Momentum must concentrate on providing users with a consistent and positive image of the company through local personnel. Very simply, a good working relationship with local service personnel is key to customer satisfaction and continued business.

C

User Satisfaction With Service Delivery

In terms of the support product, satisfaction with a number of specific component factors was measured by individual users, and results are presented in Exhibit II-9. Although a large percentage of users expressed high levels of satisfaction with support overall (nearly 80% of the sample rating overall satisfaction at 8 points or over), two areas of significant concern were identified by users: spare parts support and preventive maintenance (PM).

EXHIBIT II-9

USER SATISFACTION WITH MOMENTUM SERVICE DELIVERY

SERVICE COMPONENT	RATING (1=LOW, 10=HIGH)
Overall Satisfaction with Service	8.3
Prime-Shift Remedial Support	8.2
Engineer's Ability to Resolve Problem	8.2
Availability of Spare Parts	7.4
Preventive Maintenance Performed	6.0

Average Standard Error of the Mean: 0.2



User anxiety over the availability of the spare parts needed to repair their systems is an industry-wide problem and an even more prevalent issue in non-manufacturer supplied maintenance; user concern over parts availability, whether real or illusory, is reinforced by constant press coverage of TPM versus manufacturer litigation over the issue. Momentum users expressed considerable concern over spare parts availability, as reflected by their overall satisfaction of 7.5 points and the number of mentions parts problems warranted in their individual comments (as listed in Exhibit II-10).

EXHIBIT II-10

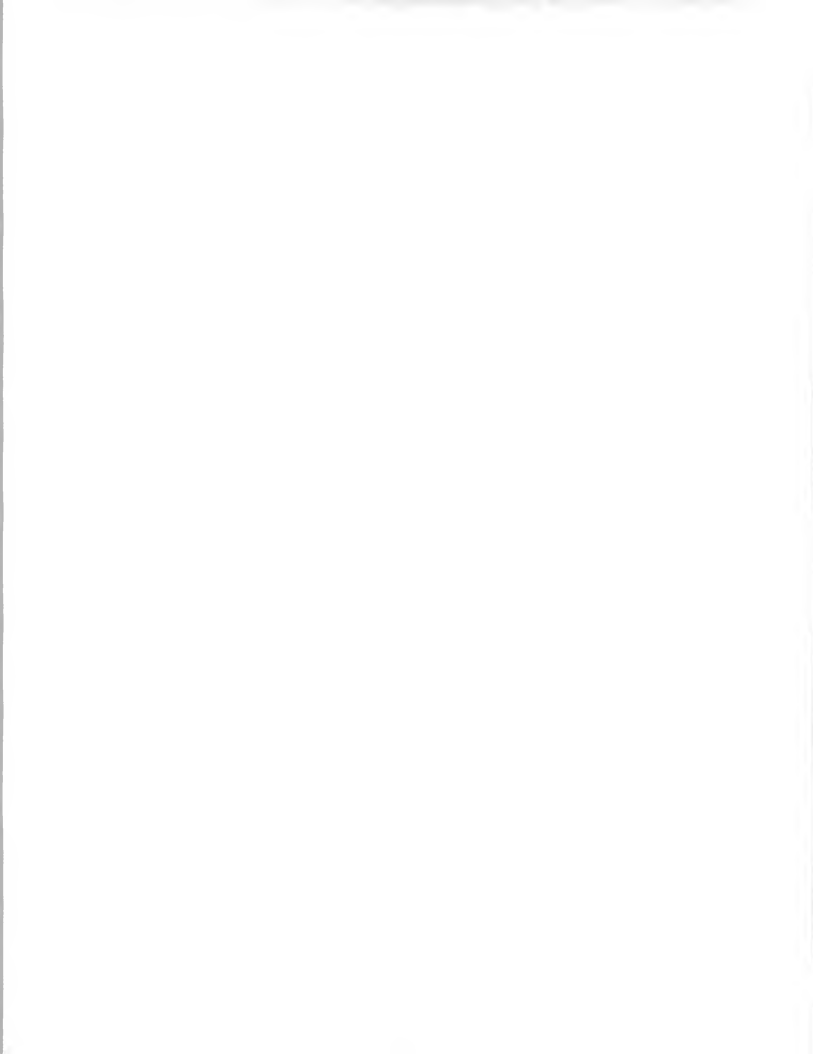
USER ANXIOUS OVER AVAILABILITY OF SPARES

- "Local parts inventory (needed)."
- "More availability of spare parts."
- "Carry more parts with (FE) to fix on the spot."
- "Ability of (FE) to get needed parts within 24 hours."
- "Parts not readily available."
- "If anything, parts (availability) needs improvement."

Sample: 18

Concern over spares was reported both in terms of their timely availability from local inventories and in the FE's ability to reach the system site with the appropriate parts in hand. Users particularly sensitive to the parts availability issue can be easily swayed toward equipment-vendor support or by support marketing centered on vendors' parts support strengths, which is becoming increasingly popular within the TPM market. Momentum should work to alleviate user anxiety in this area to avoid customer loss to manufacturers or other national TPMs.

A second and even more pronounced problem was identified in preventive maintenance support, with users rating satisfaction with this component at a low 6.0 points. In fact, nearly 15% of users reported that they had never received a preventive maintenance call in the history of their



relationship with Momentum! The lowest rated of all areas of support researched, Momentum's PM support earned the worst possible rating of 1 (on a 1 to 10 scale) in nearly 30% of respondent cases. Exhibit II-11 reports the comments users related in reference to Momentum's PM support, or lack of it.

EXHIBIT II-11

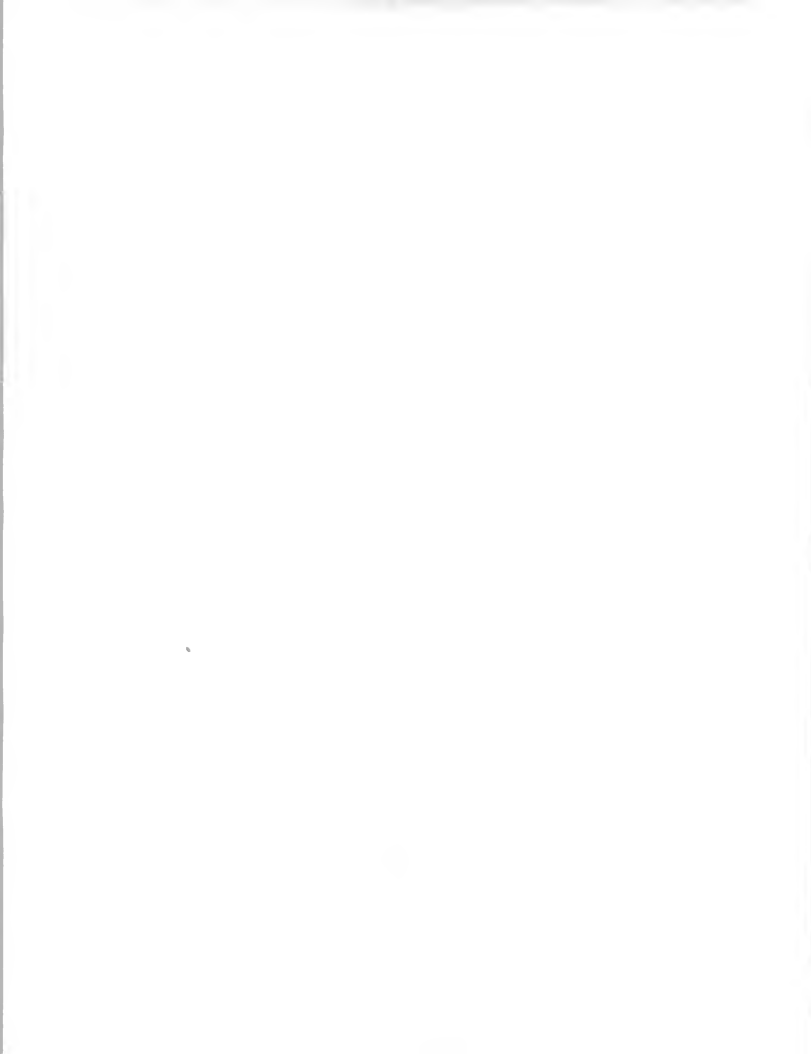
PREVENTIVE MAINTENANCE SURFACED AS A PROBLEM AREA

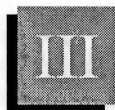
- "More regular preventive maintenance."
- "Not getting enough complete preventive maintenance."
- "Much more preventive maintenance performed!"
- "More communication to help them improve PM service."
- "(PM) needed more often and more thoroughly."

Sample: 17

Preventive maintenance, although an added cost to overall support provision, works to benefit both the user and the support vendor over the term of the relationship. Users, placing ever increasing demands on their system components, enjoy fewer interruptions from regularly maintained products. Vendors, on the other side of this coin, are faced with fewer emergency repair calls and, through preventive measures, can provide customers with the increased uptime they desire.

At the same time, PM visits provide the user with a tangible reminder of the benefits of continuing the support relationship, as well as a chance to voice any rising concerns or problems to a Momentum representative before they reach the critical stage. The vendor is provided with a chance to increase visibility and improve communication between the client and its service staff. The potential benefits that preventive maintenance visits can foster in the long run can far outweigh the short-term financial deduction. Momentum, especially in light of the communications and FE image problems reported by users, could well profit by examining these possibilities.





Conclusion and Summary





III

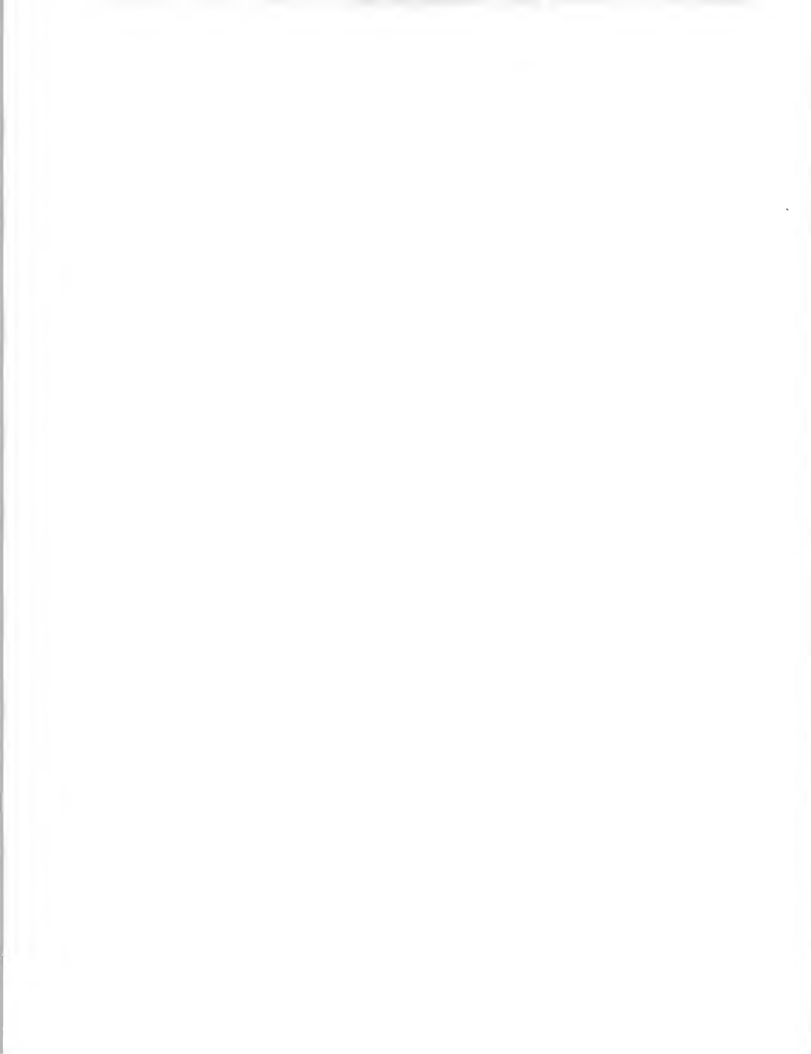
Conclusion and Summary

In reviewing the overall response of the sample, Momentum users as a group expressed a high degree of satisfaction with the services Momentum provided. As was evidenced in Exhibit II-1, 85% of Momentum users were satisfied with response performance, despite average response times well above an overall TPM average response recorded by INPUT in our annual report on third-party user satisfaction. Even viewed across increasing levels of user requirements, Momentum response consistently approached user needs, although Exhibit II-3 illustrates the remaining gap to be bridged in response performance if user satisfaction is to be increased.

Exhibit II-5 reveals a high degree of effectiveness within Momentum's service staff, an area which cannot be underestimated in its effect on user perceptions of Momentum. Action should be taken, however, to quell the personnel performance concerns of the small but adamant group of users (discussed in section II-B), and efforts should be made to assure that these problems remain isolated.

Users reported a high level of satisfaction with support overall (rated 8.3, Exhibit II-9), although parts availability and preventive maintenance support surfaced as trouble spots especially pronounced in the area of PM delivery. Momentum should address these shortcomings before their effects come to surface on the bottom line.

As indicated by the sample of glowing compliments presented in Exhibit III-1, Momentum users remain highly satisfied with their support vendor, despite problems they have experienced in specific service areas. Faced with escalating competition in the TPM arena as well as increased contention from manufacturer support rivals, however, Momentum must be cautioned against resting long on its laurels.



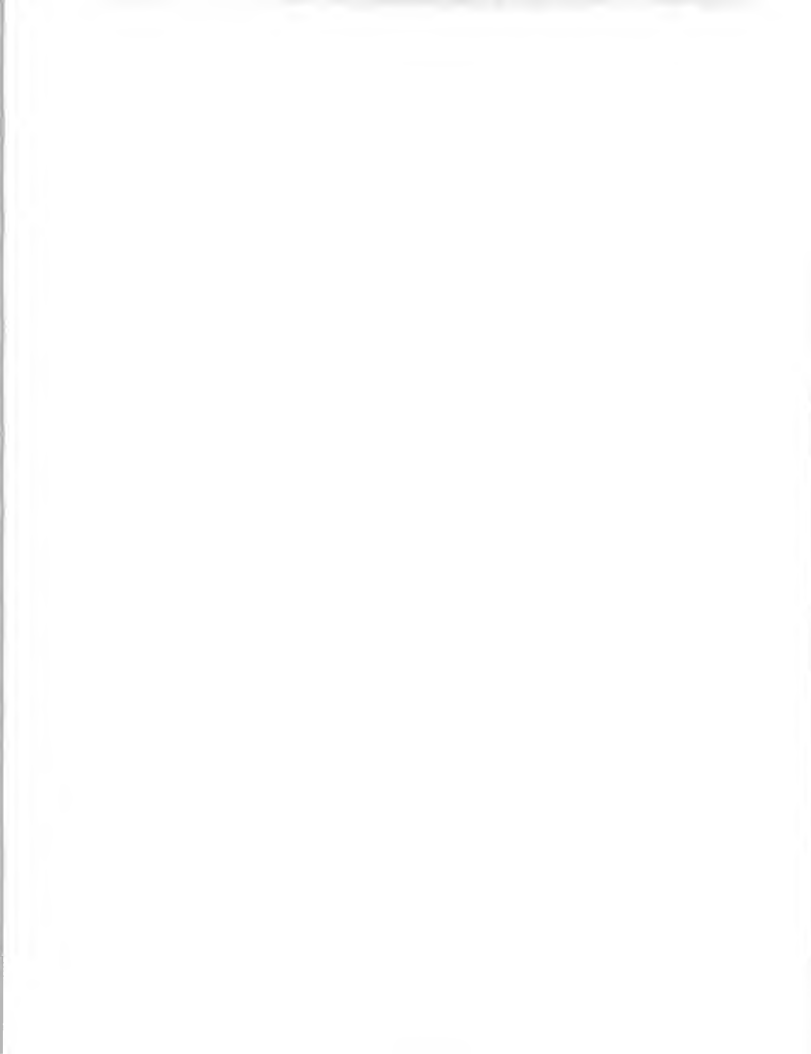
Users' service requirements are in constant flux when fed by ongoing competitive bidding for their support dollar. Fully aware that they are enjoying the upper hand in a "buyers market," users will continue to place increasing demands on their support vendors and hesitate less to switch their loyalties when problems arise in their current services. Third-party vendors who keep a watchful eye on these user perceptions of their support enjoy a true competitive edge in this highly competitive marketplace.

EXHIBIT III-1

**MANY USERS REMAIN
HIGHLY SATISFIED:**

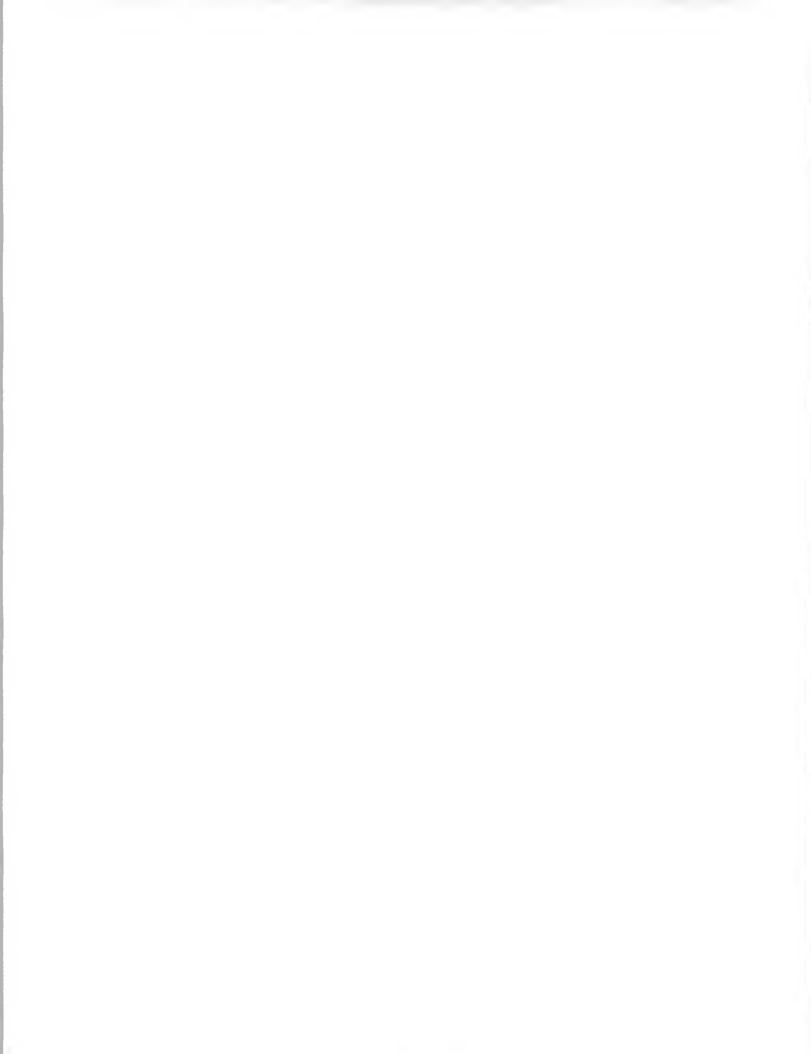
- "Service is excellent."
- "Very satisfied with service."
- "Hardware service is superb."
- "No problems!"
- "Can't improve!"
- "Perfectly satisfied."

Sample: 42





Questionnaire



Questionnaire

1. Which category best describes your operation?
 - a. Single-location company _____
 - b. Headquarters _____
 - c. Other _____

2. How many years have you been a Momentum service customer (please include all time as a MDS service customer)?
 - a. Less than 1 year _____
 - b. 1 - 3 years _____
 - c. More than 3 years _____

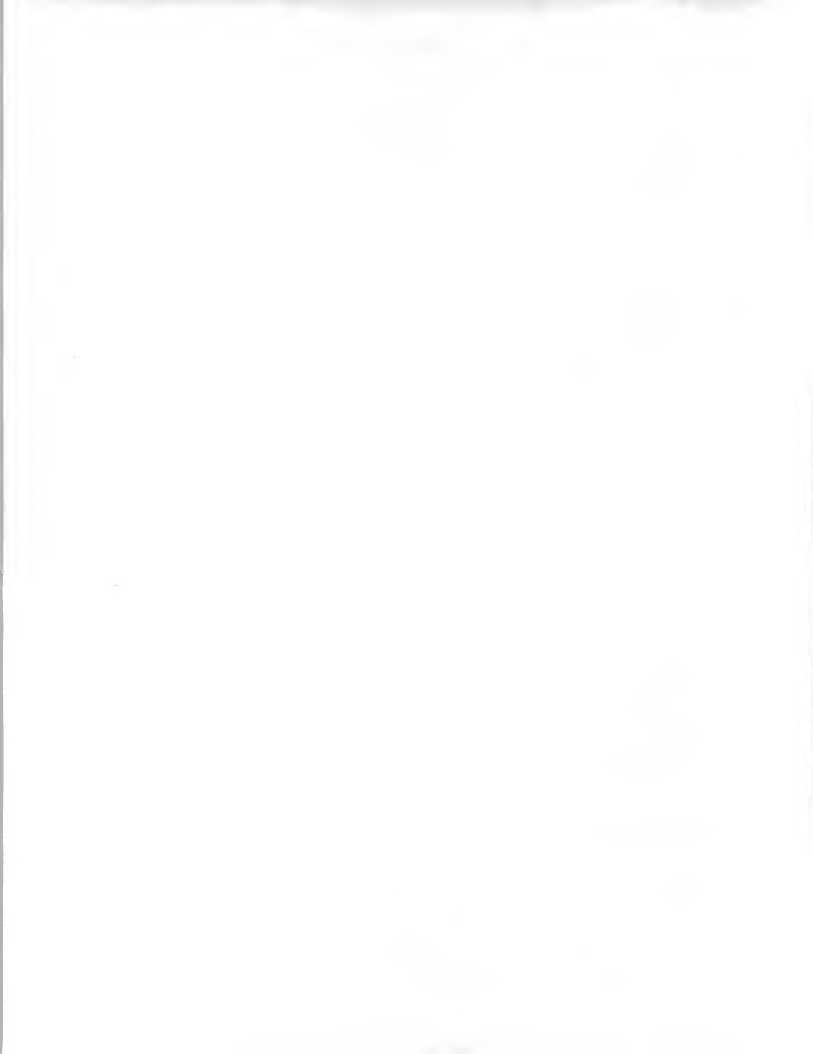
3. How far from a Momentum service location are you?
 - a. Less than 10 miles _____
 - b. 10 - 25 miles _____
 - c. 26 - 50 miles _____
 - d. More than 50 miles _____
 - e. Don't know _____

4. What response time do you require? _____

5. What response time do you receive? _____

6. On a scale of 1 - 10 (1=lowest satisfaction and 10=highest satisfaction), please rate your satisfaction with the following:

	Satisfaction 1-10
a. Customer engineer attitude	_____
b. Local service manager	_____
c. Customer engineer's appearance	_____
d. Communication with your engineer	_____
e. Communication with local service management	_____



7. *How satisfied, on a scale of 1-10 (1=lowest effectiveness and 10=highest effectiveness), is Momentum at the following?*

Satisfaction
1-10

- | | | |
|----|---|-------|
| a. | Engineer's ability to resolve problem | _____ |
| b. | Prime-shift (M-F, 8-5) remedial support | _____ |
| c. | Preventive Maintenance performed | _____ |
| d. | Availability of spare parts | _____ |
| e. | Overall satisfaction with service | _____ |

8. *Do you currently have extended coverage?* _____

- a. *If yes, how would you rate your satisfaction with response time during the extended hours?*

9. *What service area, if any, would you like to see improved or added to increase your satisfaction with Momentum service?*

Thank you for your assistance!

